

11.10.05



WORKER RIGHTS CONSORTIUM

## **The Impact of Substantial Labor Cost Increases on Apparel Retail Prices**

This document provides background information concerning the likely impact of substantial labor cost increases, such as those that would result from the implementation of USAS's proposed Designated Supplier Program, on the retail price of university logo apparel. The evidence available indicates that such substantial increases in labor costs would result in relatively small increases in retail prices.

The key data point in assessing the likely impact on prices is the percentage of the retail price of a garment that is accounted for by labor costs. While estimates vary by product and location of production, it is clear from information supplied by apparel industry sources, and from published academic research, that labor costs represent a very small portion of retail price: typically 1-3% for a garment sewn in the developing world. Thus large increases in labor costs do not require correspondingly large increases in retail price. For example, for a typical sportswear garment, doubling labor costs (by doubling wages) would result in retail price increases of roughly 1-3%; tripling wages would result in price increases of 2-6%. In most cases, the resulting price increases would be toward the lower bound of these ranges. These estimates assume that all of the increased cost is passed along to the consumer; if some of the costs are absorbed by licensees, retail price increases would, of course, be commensurately smaller.

Before reviewing empirical data on production costs, it may be helpful to briefly review the production process and key terms used in pricing discussions in the apparel industry. Apparel brands (known in the industry as "manufacturers" or "importers" and in the university context as "licensees") typically contract out the production of apparel goods to independently owned supplier facilities, in some cases through intermediary organizations known as "agents". The price paid by a brand to a supplier facility at the factory door – before shipping and import fees – is known as the "Freight-on-Board" (FOB) price; it includes all labor and non-labor production costs of the factory, including factory overhead, cloth and other materials, labor, and profit. The final price paid by a brand or licensee for finished goods, including shipping, duty, delivery, insurance, and customs clearance costs, is called the "Landed-Duty-Paid" (LDP) price. The price paid by the retailer to the brand or licensee for finished goods is the wholesale price.

As the price for apparel goods increases at each level of the supply chain (typically doubling at each stage, from factories to wholesalers to retailers), the proportion of costs accounted for by labor decreases. In developing countries, direct (non-supervisory) labor in the production of sports apparel generally accounts for 7-11% of a factory's overall production costs; in most cases and in most countries, the percentage is at the lower end of this range. By the time the goods reach the retail floor, labor costs account for only 1-3% of the price paid by consumers.

These estimates are supported by academic research on the relationship between apparel production costs and retail prices. The most thorough analysis on this subject was undertaken by Robert Pollin and James Heintz of the University of Massachusetts-Amherst and Justine Burns at the University of Cape Town.<sup>1</sup> Their study analyzes the production costs of a range of apparel items manufactured in the U.S. and Mexico and sold in the U.S. Using data from Mexico's National Economic Census, the study finds that for a men's casual shirt manufactured in Mexico, direct labor is \$0.50 – or 11.2% of the factory's overall production costs – for an item that the factory sells for \$4.45. The product is sold in the U.S. for a retail price of \$32.00. Thus, direct labor accounts for 1.6% of the final retail price. The authors estimate the impact of wage increases on retail prices. They conclude that doubling the wages of all non-supervisory workers would result in a new retail price of \$32.50, which represents a retail price increase of roughly 1.6%. The study finds similar results for other apparel products manufactured in Mexico.

In order to preserve pay hierarchies, when wages are increased for non-supervisory workers, factories may also wish to increase the salaries of supervisors. Pollin, Heintz and Burns estimate the potential “ripple effect” on supervisory wages of wage increases at the bottom of the pay scale. In a scenario in which the wages of both non-supervisory workers and all supervisory workers – including all managers and professional staff – are doubled, they conclude that the final retail price would increase to \$32.90, a retail price increase of 2.8%. Given that high-level managers and professional staff typically earn many times the wage of a production worker, a 100% increase in their salaries would not be necessary to maintain a sharp pay hierarchy. Thus, as the study notes, this scenario establishes “an outer bound estimate of the potential ripple effect”. The actual effect would likely be smaller.

Using data from industry sources, the WRC calculated the likely impact of wage increases of various sizes on the retail price of two typical university sports apparel items. This information is summarized in the tables below. Table 1 summarizes production cost data for a men's knit shirt manufactured in the Philippines and sold in the U.S. for a retail price of \$44.00. In this instance, labor costs, including the salaries of floor supervisors but not higher management, are \$0.69 – 8.6% of the factory's overall production costs for the garment. Labor costs represent 1.56% of the final retail price. A 50% wage increase would result in a retail price increase of 0.78%, for a new retail price of \$44.34. Doubling wages would result in a retail price increase of 1.54%, with a new retail price of \$44.69. Tripling wages would result in a new retail price of \$45.38, an increase of 3.03% over the initial price. In each case, it is assumed that the entire increase in labor costs is passed along to consumers.

Table 2 summarizes production cost data for an embroidered logo sweatshirt manufactured in the Dominican Republic and sold in the U.S. at a retail price of \$35.00. In this instance, the production costs accounted for by direct and supervisory labor represent 7.1% of the factory's overall production costs and 1.29% of the final retail price of the garment. A wage increase of 50% would yield a new retail price of \$35.23, an increase of 0.64% over the original retail price. Doubling wages would result in a new retail price of \$35.45, an increase of 1.27%. Tripling wages would result in an increase of 2.51%, for a new retail price of \$35.90. As in the previous example, this scenario assumes that the entire increase in cost is passed along to consumers.

---

<sup>1</sup> Pollin, Robert, James Heintz, and Justine Burns. 2002. “Global Apparel Production and Sweatshop Labor: Can Raising Retail Prices Finance Living Wages?” Political Economy Research Institute, University of Massachusetts at Amherst, Working Paper Series, Number 19.

These examples are illustrative of general practices in the industry for sportswear garments manufactured in developing countries. It is, however, useful to note that the countries cited in the examples – Mexico, the Philippines, and the Dominican Republic – have relatively high labor costs. Prevailing wage rates in other key apparel-exporting countries – such as Cambodia, Bangladesh, China, Indonesia, India, and Pakistan – are substantially lower. As a result, the impact of labor cost increases on retail prices would be somewhat lower for products sewn in those countries.

The Apparel Industry Partnership (AIP), out of which the Fair Labor Association was formed, has cited lower estimates of the proportion of apparel retail prices accounted for by labor costs. In a letter to the U.S. Department of Justice, the AIP stated that "labor typically accounts for less than 3% of the United States retail price of clothing made in domestic sweatshops and as little as 0.5% for garments sewn abroad".<sup>2</sup>

In assessing the likely impact of wage increases on retail prices, another issue to consider is how increased labor costs at the factory level are treated down stream in the distribution process. As noted above, apparel brands and retailers often set prices as a multiple of the price at which they purchased the goods. Some in the industry argue that any increases in labor costs would consequently be multiplied as the garment progresses toward the retail shelf. However, there is no rule requiring such pricing practices; rather this is a choice brands, licensees and retailers have to make. If consumers are sensitive to price increases in the retailing of university logo apparel, as virtually all licensees would claim, then it is difficult to see how it would be in the interest of licensees or retailers to increase prices any more than is necessary. The level of labor cost increases discussed above would, even if all costs were passed along to consumers, require only very modest price increases. It would not be rational for licensees and retailers who are concerned about price sensitivity to eschew these modest increases in favor of far larger price hikes.

In sum, the information available supports the conclusion that substantial increases in the cost of labor would result in relatively small increases in the retail price of collegiate apparel.

---

<sup>2</sup> Quoted in a "business review letter" sent from Joel L. Klien, U.S. Assistant Attorney General to Kenneth A. Letzler and Richard M. Lucas, legal representatives of the Apparel Industry Partnership, April 7, 2000.

<b>Table 1</b> <b>Consequences of Wage Increases on Apparel Production Costs</b> Men's Knit Shirt (Manufactured in the Philippines) <sup>3</sup>				
<b>Apparel Costs</b>	<b>Costs at current wage rate</b>	<b>Impact of 50% increase in wages</b>	<b>Impact of doubling wages</b>	<b>Impact of tripling wages</b>
<b>Non-labor costs of production</b> (includes fabric and other materials, factory overhead, and factory profit)	\$7.31	\$7.31	\$7.31	\$7.31
<b>Labor costs of production</b> (includes direct and supervisory labor)	\$0.69	\$1.03	\$1.38	\$2.06
<b>Freight-on-Board (FOB) price</b> (price to brand at factory door: includes all labor and non-labor production costs of factory)	\$8.00	\$8.34	\$8.69	\$9.38
<b>Labor costs as a % of FOB price</b>	8.6%	12.4%	15.8%	22.0%
<b>Landed-Duty-Paid (LDP) price</b> (final cost to brand: includes FOB price plus shipping, duty, delivery, insurance, and customs clearance)	\$10.00	\$10.34	\$10.69	\$11.38
<b>Labor costs as a % of LDP price</b>	6.9%	10.0%	12.9%	18.1%
<b>Wholesale price</b>	\$20.00	\$20.34	\$20.69	\$21.38
<b>Labor costs as a % of wholesale price</b>	3.44%	5.07%	6.65%	9.65%
<b>Retail price</b>	\$44.00	\$44.34	\$44.69	\$45.38
<b>Labor costs as % of retail price</b>	1.56%	2.33%	3.08%	4.55%
<b>% change in retail price</b>	0%	0.78%	1.54%	3.03%

<sup>3</sup> Source: Birnbaum, David. 2000. *Birnbaum's Global Guide to Winning the Great Garment War*. The Fashionindex, Inc. With additional calculations by the WRC.

<b>Table 2</b> <b>Consequences of Wage Increases on Apparel Production Costs</b> Embroidered Logo Sweatshirt (Manufactured in the Dominican Republic) <sup>4</sup>				
<b>Apparel Costs</b>	<b>Costs at Current wage rate</b>	<b>Impact of 50% increase in wages</b>	<b>Impact of doubling wages</b>	<b>Impact of tripling wages</b>
<b>Non-labor costs of production</b> (includes fabric and other materials, factory overhead, and factory profit)	\$5.89	\$5.89	\$5.89	\$5.89
<b>Labor costs of production</b> (includes direct and supervisory labor)	\$0.45	\$0.68	\$0.90	\$1.35
<b>Freight-on-Board (FOB) price</b> (price to brand at factory door: includes all labor and non-labor production costs of factory)	\$6.34	\$6.57	\$6.79	\$7.24
<b>Labor costs as a % of FOB price</b>	7.1%	10.3%	13.3%	18.6%
<b>Landed-Duty-Paid (LDP) price</b> (final cost to brand: includes FOB price plus shipping, duty, delivery, insurance, and customs clearance)	\$7.89	\$8.12	\$8.34	\$8.79
<b>Labor costs as a % of LDP price</b>	5.7%	8.3%	10.8%	15.4%
<b>Wholesale price</b>	\$15.78	\$16.01	\$16.23	\$16.68
<b>Labor costs as a % of wholesale price</b>	2.85%	4.22%	5.55%	8.09%
<b>Retail price</b>	\$35.00	\$35.23	\$35.45	\$35.90
<b>Labor costs as % of retail price</b>	1.29%	1.92%	2.54%	3.76%
<b>% change in retail price</b>	0.00%	0.64%	1.27%	2.51%

<sup>4</sup> Source: Paul Gill, Golden Mountain Apparel, with additional calculations by the WRC.